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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,068	07/15/2003	Kai H. Chang	Chang 6-17-28	7129
7590	03/30/2005		EXAMINER	
Fitel USA Corp. Room 2H02 2000 Northeast Expressway Norcross, GA 30071			HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/620,068	CHANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 March 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) *3-7-05*
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backer 5180411 in view of Tuminaro 6496627.

**A method for making optical fiber, the method comprising the steps of:**  
**forming a glass core rod by soot deposition, the glass core rod having a core**  
**region surrounded by a cladding region,**

See Backer at col. 9, lines 34-42.

**dehydrating the glass core rod;**

See Backer at col. 13, lines 24-40.

**consolidating the glass core rod to form an optical fiber preform;**

See Backer at col. 10, lines 39-40.

**drawing fiber from the optical fiber preform;**

See Backer at figure 3.

**and exposing the drawn optical fiber to an atmosphere containing**  
**deuterium at room temperature.**

Backer does not teach this. Tuminaro discloses that deuterium exposure results in improved long term signal attenuation performance. See col. 2, lines 47-60, and col, 3, line 40 to col. 4, line 9. It would have been obvious to improve the long term performance of the Backer fiber, by exposing it to deuterium as disclosed by Tuminaro. Col. 17 lines 56-59 discloses the room temperature exposure.

Claim 2 is in a format that is not consistent with any format that is sanctioned by the MPEP or the courts. There are various ways to interpret the claim – but the Office must use the broadest reasonable interpretation.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The “broadest reasonable interpretation” rule recognizes that “before a patent is granted the claims are readily amended as part of the examination process.” Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule “serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified.” In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

It is deemed that the broadest reasonable interpretation is: The method as recited in claim 1, wherein the exposing step further comprises one of the group comprising: exposing the drawn optical fiber to a deuterium atmosphere having a partial pressure of approximately 0.01 atmospheres of deuterium at room temperature for approximately 6 days, and exposing the drawn optical fiber to a deuterium atmosphere having a partial pressure of approximately 0.05 atmospheres of deuterium at room temperature for approximately 1.5 days.

(another reasonable interpretation would be: The method as recited in claim 1, wherein the exposing step further comprises one of the group consisting: exposing the drawn optical fiber to a deuterium atmosphere having a partial pressure of approximately 0.01 atmospheres of deuterium at room temperature for approximately 6 days, and

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exposing the drawn optical fiber to a deuterium atmosphere having a partial pressure of approximately 0.05 atmospheres of deuterium at room temperature for approximately 1.5 days.

Since "comprising" is broader than "consisting" the Office MUST use the broader of the two)

Based on the above broadest reasonable interpretation: since the group is comprising in nature, it is open to other members – including the exposure of Tuminaro. Clearly the Tuminaro reads on the exposure of Tuminaro.

Claim 3: Since Tuminaro does the same thing that applicant does (for substantially the same reason – to cure defects) one would expect substantially the same result.

Claim 8: See Backer, col. 9. lines 34-38.

Claims 4-6: see col. 9,lines 47-48 of Backer: the additional overcoating cladding soot is the same thing as "overclad". The overclad would be dehydrated and consolidated the same time the rest of preform is dehydrated and consolidated.

Claim 9: the "thereafter" limitation is not given any patentable weight. It is deemed that patents only cover the past and present – not the future. No one has the ability to predict the future. Alternatively, it is deemed that "the aging loss" is interpreted as "an aging loss" It is deemed that an aging loss of an aging of 1 microsecond would clearly be less than 0.04 db/km. As to the transmission loss: Backer does not disclose the claimed loss. It would have been obvious to make perform the Backer/Tuminaro method, so that the fiber has the lowest possible transmission loss and the loss possible aging loss increase. It is noted that any evidence or argument that indicates that one of ordinary skill would not know how to

have the claimed loss and loss increase, may be used as evidence in a rejection that the present invention is not enable, or that the claim lack a critical step.

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyobe 5262365 in view of Tuminaro 6496627 and Baumgart 4820322.

Oyobe discloses the invention except for the deuterium treatment and the overcladding. See Oyobe, col. 16, lines 1- 40. The heat treatment is deemed to be a dehydration (compare to Oyobe col. 12, lines 40-48.)

Tuminaro discloses that deuterium exposure results in improved long term signal attenuation performance. See col. 2, lines 47-60, and col. 3, line 40 to col. 4, line 9. It would have been obvious to improve the long term performance of the Oyobe fiber by exposing it to deuterium as disclosed by Tuminaro.

Baumgart discloses in col. 1 that one can make more fiber by overcladding a preform made by MCVD. That is, one can scale up an MCVD process - but that such requires overcladding with a tube. It would have been obvious to scale up the Oyobe process to make the preforms large 1 (as taught by Baumgart, and including overcladding with a tube) so that one can increase productivity.

#### ***Information Disclosure Statement***

The information disclosure statement filed 3/07/05 fails to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 CFR 1.97(e). It has been

placed in the application file, but the information referred to therein has not been considered.

The information disclosure statement filed 3/07/05 fails to comply with 37 CFR 1.97(c) because it lacks the fee set forth in 37 CFR 1.17(p). It has been placed in the application file, but the information referred to therein has not been considered.

Although Applicant indicates that the references were previously cited, the requirements under 37 CFR 1.97 and MPEP 609 still apply.

**From MPEP 609:**

Applicant may then file a new information disclosure statement or correct the deficiency in the previously filed IDS, but the date that the new IDS or correction is filed will be the date of the IDS for purposes of determining compliance with the requirements based on the time of filing of the IDS (37 CFR 1.97).

***Response to Arguments***

Applicant's arguments filed 3/07/05 have been fully considered but they are not persuasive.

It is argued that Tuminaro does not teach deuterium exposure at room temperature. Applicant acknowledges that the rejection states that col. 17, lines 56-59 teaches the required exposure. However, Applicant does agree that the passage teaches the required exposure. But Applicant does not appear to point out how or why if fails to teach the required exposure. The relevant passage states "the chamber is returned to ambient temperature while the partial D2 pressure is maintained." To

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examiner it is very clear that the passage discloses exposure to Deuterium at room temperature.

It appears that Applicant's position is that Tuminaro's exposure to high temperature means that the claim language is not met. This is largely immaterial. The claims are comprising in nature: they are open to having exposure at an elevated temperature in addition to the exposure at room temperature. Examiner can see no basis for interpreting the claim language as excluding other exposures.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The "broadest reasonable interpretation" rule recognizes that "before a patent is granted the claims are readily amended as part of the examination process." Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule "serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

In other words: Although Tuminaro's exposure is quite different from Applicant's disclosed exposure, the present claim are very broad and encompasses Tuminaro's exposure at room temperature albeit brief and at the end of the treatment. Nor has Applicant pointed out how the present claim language excludes Tuminaro's exposure at room temperature.

**From MPEP 2111.01**

(Ordinary, simple English

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words whose meaning is clear and unquestionable, absent any indication that their use in a particular context changes their meaning, are construed to mean exactly what they say. Thus, "heating the resulting batter-coated dough to a temperature in the range of about 400oF to 850oF" required heating the dough, rather than the air inside an oven, to the specified temperature.).< One must bear in mind that, especially in nonchemical cases, the words in a claim are generally not limited in their meaning by what is shown or disclosed in the specification. >See, e.g., Liebel-Flarsheim Co. v. Medrad Inc., 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004)

Likewise the present claims are construed to mean exactly what they say: the fiber must be exposed to deuterium that is at room temperature. The claim says nothing about the fiber ~~also~~ <sup>Not</sup> being exposed to deuterium at a temperature that is not room temperature.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1700.

John Hoffmann  
Primary Examiner  
Art Unit 1731

3-28-05